



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,760	10/18/2005	Yutaka Shibui	01165.0934	9318

22852 7590 04/05/2007
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER
LLP
901 NEW YORK AVENUE, NW
WASHINGTON, DC 20001-4413

EXAMINER

RAO, SHEELA S

ART UNIT	PAPER NUMBER
----------	--------------

2125

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/522,760	Applicant(s) SHIBUI, YUTAKA	
	Examiner Sheela Rao	Art Unit 2125	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 6-8 is/are rejected.
- 7) ☒ Claim(s) 2-5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>see attached</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office action is in response to the application papers filed on 18 October 2005.
2. Claims 1-8 are pending and presented for examination.
3. Receipt is acknowledged of papers submitted under 35 U.S.C. §119(a)-(d), which papers have been placed of record in the file.
4. Applicant's submission of references on form PTO-1449, filed May 4, 2005, has been received and considered. A signed copy of the form is attached.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. Claims 1 and 6 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1: at line 10, "an inherent standard tip position" is cited. Applicant's definition of "inherent standard" is not clear. Inherent is defined as an essential characteristic and standard is known to be a general or recognized value, but what is considered to be an essential characteristic or recognized value of a tip position is not a general limitation that is widely used. Characteristics and values are usually specific to the use or purpose of a device or item. In the instant limitation, what is considered to be the "inherent standard" has not be clearly defined but is ambiguous stated to be any value or characteristic. The definitions as stated heretofore are taken from the Merriam Webster's Online dictionary;

at line 12, "slightly" as claimed is a term of degree for spacing the tip of a tool which is an indefinite statement of the limitation. The term "slightly" is a relative term which renders the claim

indefinite. The term "slightly" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

- at line 24, "in said all of said tools" does not seem to be grammatically clear as to what is intended to be limited in the instant claim.

Claim 6 is improperly claimed as the instant claim begins in the preamble by limiting the instant invention to a control device but then concludes by stating that the selection method is "according to any one of claims 1 to 5". Using such language in citing the instant limitations leads to confusion and disparity as to whether Applicant is claiming an apparatus or further limiting the methodology of the instant invention. Furthermore, it is not clearly evident whether Applicant intends for instant claim 6 to be an independent claim for establishing the limitations of a control device or a dependent claim to further limit the methodology of claims 1-5.

Appropriate correction is required.

7. Claim 6 recites the following limitations, wherein there is insufficient antecedent basis for these limitations in the claim.

At line 5 - "said clearance distance", at line 6 - "said tools mounted" and "said tool rest", at line 7 - "said tool rest", at line 10 - "said maximum tip distance" and "said tool-change starting position", at line 11 - "said tool-selection completing position", at line 16 - "said tool rest", and at line 17 - "said first and second control axes".

Appropriate correction is required.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. § 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter,

or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 6-8 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. The limitations of claim 6 do not fall into a statutory category, i.e. method, product, or composition, as per the requirements of 35 USC §101. The subject matter that Applicant has invented and is seeking to patent is not sufficiently suitable to be categorized any one of the particular groups used in determining patentability and thus is unpatentable. The improper hybrid language of the instant claim further inhibits the claim to fit into any particular category. Claims 7 and 8 are rejected for the same reasons as aforementioned with regard to claim 6 as these claims are directly dependent upon and further limit claim 6.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 6-8 are rejected under 35 U.S.C. §102(b) as being anticipated by US Patent Number 6,636,777 B1 issued to Kokubo et al.

The prior art reference to Kokubo et al. (hereinafter, "Kokubo") teaches of a positioning device that is mounted on a machine tool used to position the tip end of a tool relative to the center axis of a bar without damaging the external periphery of the tool or bar. In doing so, Kokubo teaches the limitations of the instant invention. As the limitations of the instant claims can best be interpreted, in view of the 35 USC § 112, 2nd paragraph, and 35 USC §101 rejections as aforementioned, the claims are rejected as being anticipated by Kokubo, as stated herein below.

With regard to claim 6, a storage section for storing data related to the tip and tool is taught as being stored in the storage part of the controlling section as stated at lines 6-10 of column 10. The

processing section for calculating data to issue a position command is taught in column 8 at lines 25-28 as well as beginning at line 60 in column 9 as the corrective processing section that properly corrects the machining-position data for the tool. Lastly, the drive control section for controlling the motion along the axes is explained in column 8, lines 12-42, as the positioning device that includes a driving mechanism for positioning or moving a tool.

The control device being a numerical control device with a numerically controlled lathe, as per claims 7 and 8, respectively, is disclosed at column 5, line 66-67, as the automatically operated lathe, along with an explanation of the automatically operated lathe being a machine tool such as a NC, or numerically controlled, lathe at column 1, lines 22-26.

12. For the reasons stated above in paragraphs 5-11, the limitations of the claimed invention is taught by the prior art of record; thereby, rendering the instant claims unpatentable.

Allowable Subject Matter

13. Claims 2-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

USPN 3,868,763 Sato

Teaches of an automatic tool exchanging apparatus for use in combination with a machine tool.

USPN 4,033,206 Morita et al.

Teaches of a numerically controlled machine tool that are characterized in working modes of cutting tools.

USPN 6,817,111 B1 Corrado

Teaches of an alignment tool for positioning the tip of a cutting tool of a shaping machine.

USPN 4,369,563 Williamson

Teaches of a system with a plurality of numerically controlled machine tools wherein workpieces are subjected to selected machining operations.

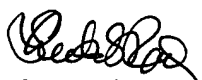
USPN 3,710,466 Williamson et al.

Teaches of a machine tool used for data control.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheela Rao whose telephone number is (571) 272-3751. The examiner can normally be reached Monday - Friday from 8:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard, can be reached on (571) 272-3749. The fax number for the organization where this application or any proceeding papers is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. It should be noted that status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should any questions arise regarding access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Sheela S. Rao
March 20, 2007